GOVERNMENT OF INDIA
PETROLEUM AND NATURAL GAS
LOK SABHA

UNSTARRED QUESTION NO:1782
ANSWERED ON:11.12.2008
HYDROGEN BLENDED CNG
Singh Baba Shri K.C.

Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) Whether the government has taken any decision for blending hydrogen with Compressed Natural Gas (CNG) to reduce Nitrogen Oxide emission which will be less polluting and substantially reduce harmful emission from vehicles;

(b) if so, the details thereof; and

(c) the time by which the country's first hydrogen blended CNG filling station is likely to begin functioning in Delhi and Metro Cities in the country and the cost per kg. of such hydrogen blended CNG fuel?

Answer

MINISTER of STATE for PETROLEUM & NATURAL GAS (SHRI DINSHA PATEL)

(a) No decision has been taken in this regard by the Government at present. The matter is at experimental stage.

(b) The Research and Development Centre of Indian Oil has undertaken research work by blending Hydrogen with CNG on select vehicles. For this purpose, a Hydrogen- CNG mixing unit and dispensing station for the mixture has been commissioned at Faridabad. Presently, a few vehicles are being tested with up to 10% hydrogen in CNG. Further, R&D work had been planned jointly with vehicle manufacturers for carrying out necessary modifications in the engine for achieving the benefits in terms of NOx reduction.

(c) A Hydrogen and Hydrogen- CNG dispensing station for fuelling the IOC R&D test vehicles has already been commissioned at R&D Centre of Indian Oil Corporation in Faridabad. This is the first station of the country which is already in operation. Another Hydrogen and Hydrogen-CNG Mixture dispensing station (at IOC's Company Owned and Company Operated (COCO) retail outlet at Dwarka, New Delhi) is planned to be set up by Indian Oil Corporation as a part of demonstration project which is partly funded by Ministry of New and Renewable Energy (50%) (MNRE) and partly from Hydrogen Corpus Fund (50%) created by Ministry of Petroleum and Natural Gas. The station is expected to be commissioned in January 2009 and will be used for fueling the demonstration vehicles under various research projects of IOC as well as other agencies funded by MNRE. No decision has yet been taken with regard to commercial supply of such fuel and this decision will depend on the outcome of the research/ demonstration projects. The cost of Hydrogen- CNG blend would also depend on the cost of hydrogen production, cost of CNG and the ratio in which hydrogen and CNG are blended.